

# **E - Trac 6**

## **Troubleshooting & Maintenance Guide**



**The Three Most Common Problems**  
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**Preventive Maintenance Schedule**  
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**Standard E-Trac 6 Parts List**

The most common problems on **E-Trac** enclosed track conveyors are as follows:

1. Drive slips
2. Chain pulsation / surging
3. Premature wear of the conveyor chain

## The Three Most Common Problems

There are several possible causes that could contribute to each problem. Each problem and typical solutions are identified in this section.

### Problem: Drive slips

1. The conveyor may be overloaded.
2. The conveyor chain may be stretched / elongated more than  $\frac{1}{4}$ " per foot.
3. The conveyor chain may not be properly lubricated.
4. There may be slack conveyor chain backing into the drive unit.
5. The track may be pinched.
6. The take-up sleeves may have been installed backwards.
7. The drive unit caterpillar chain may be damaged or worn out.
8. Either the drive head or the idler shaft could be out of alignment.
9. The drive unit may be installed backwards.
10. Drive Unit Clutch Friction Liners Worn Out
11. Worn Conveyor Track Curves
12. Pendant, Hook, or Load Hang-Ups
13. Chain Corrosion from Process Equipment
14. Sub-Freezing Temperatures

### Problem: Chain Pulsation / Surging

15. Slack Chain
16. Mis-aligned Track Joints
17. Excessive Chain Pull
18. Pinched Track
19. Excessive Chain Length
20. Defective Drive

### Problem: Premature wearing of conveyor chain

21. Lack of Lubrication
22. Exposure to Abrasives
23. High Temperature
24. Corrosion
25. Drives out of location
26. Drives out of coordination

## Problem and recommended solution

1. **Conveyor Overload** - The friction clutch is designed to accommodate the starting load so the slipping occurs at approximately 750# chain pull. Therefore if a conveyor is actually overloaded, the clutch slips to protect the chain and drive mechanisms from damage. A chain pull dynamometer may be connected to the chain upstream from the drive unit in the first available straight section to determine the actual chain pull. If this is not practical, the product and the product hook should be weighed accurately and a chain pull calculation should be made. Should the calculated chain pull exceed the rated capacity, an additional drive may be required.
2. **Chain elongated** - If the conveyor chain should be elongated more than  $\frac{1}{4}$ " per foot, it will not feed properly through the drive unit. The drive unit's caterpillar drive dogs cannot properly engage the conveyor chain. Instead, the point of the dog rides on or near the top of the lateral link, thus forcing the link downward and eventually bending the center guide. To determine the actual amount of chain elongation, measure twenty 6" chain pitches. For instance if the pendants are on 12" centers, measure from the center of one pendant to the center of the tenth pendant. This will normally be 10'-0". If it should be 10'-2 1/2" the chain is elongated  $\frac{1}{4}$ " per foot. Chain needs to be tight and have some tension on it when this measurement is made. Replace the chain in the system. Also, replace the drive caterpillar chain. You will also need to check the condition of the curves. Vertical curves and horizontal curves tend to wear the fastest because they create the most friction.

3. **Conveyor not lubricated** - Conveyor chain which is allowed to run without lubrication will often require much more effort for movement and the clutch may slip. This is the reason that the chain is lubricated before it leaves the factory. Unless lubrication is provided on a regular basis, rapid wear will occur and the chain life will be reduced drastically, because of chain wear and elongation, we recommend that you purchase some type of automatic lubricator to help solve this problem. If you have a high temperature application, we suggest that you use a high temperature lubricant.
4. **Slack conveyor chain backing into the drive unit** - In single drive systems, the slack or loose chain will collect immediately in front or downstream from the drive unit, unless there is a decline just beyond. In this case, the slack will accumulate at the bottom of the decline. In a level system without an automatic take-up or where there is an incline in front of the drive, the loose chain will gather immediately in front of the drive and eventually it will crowd back into the caterpillar chain and jam it. Usually, this will bend or damage the drive chain guide and possibly the caterpillar chain.

In a multi-drive system two or more drives may not be properly spaced. The drive unit with the lightest load will tend to run a little faster so all of the systems slack chain will congregate in front of it. In this case, an automatic take-up downstream of the drive is indicated. If it is a flat or a level system, install a spring loaded or air take-up. In either arrangement, the drive unit should be located just upstream of the take-up so the chain will feed directly into the take-up. Should the drive be upstream of an inclined track section, the drive should be relocated to a point just upstream of a downward slope. Also, the drive chain should be replaced if worn.

5. **Pinched track** - The conveyor track, straight and curved has a 5/8" slot at the bottom when manufactured. However, handling and/or welding often causes the slot to be decreased. When this happens, the track width is reduced in some cases to a point where the chain will not pass freely. The restriction can jam the chain. Passing a 10'-0" section of chain through the track will locate the pinched sections of track. Also a visual inspection will detect the narrow points. If the slot, at any point, is less than 9/16" wide, it is too narrow. To correct, the slot can be widened with a pry bar and hit with the spherical end of a ball peen hammer on the top of the track in the center opposite the pry bar. This will spread the track side walls to the desired slot widths.
6. **Take-up sleeves installed backwards** - An instruction sheet accompanies all take-up units. The direction of chain travel is shown. If the instructions are not followed and the sleeves are reversed, the vertical wheels must climb upon the end of the movable inner track. This causes a rough passage of the conveyor chain and can result in a pulsation, and possible a chain stoppage. Remove the take-up units and replace as described in the instructions provided with the equipment.
7. **Drive unit caterpillar chain damaged** - The caterpillar drive chain after long wear and overloads will become a source of trouble resulting in jamming of the drive unit. Removal of the drive track lips or the drive cover will usually identify the problem. Replace the drive caterpillar chain. While certain chain can be repaired, it is usually advisable to install a new one. It may also be necessary to install a new head shaft and idler sprocket. A damaged caterpillar chain can shut down a conveyor system. Therefore, all users are seriously urged to keep a spare caterpillar chain on hand.
8. **Drive head and/or idler shaft out of alignment** - The head shaft and the idler shaft of the drive unit get out of alignment as a result of the drive take-up adjustment. If one pillow block bearing is advanced more than its mate, the two shafts are no longer parallel. This tends to cause the caterpillar dogs to twist sideways and they often move down into the side plate of the conveyor chain, thus jamming the drive. Even though the dogs manage to move in between the side plates, the strands of the caterpillar chain can wear prematurely resulting in a shut down. Readjust the drive take-ups so the head shaft and idler shafts are parallel. The take-ups should be extended to a point where no slack remains in the caterpillar chain.
9. **Drive unit installed backwards** - By accident the drive is often installed backwards. This does not cause a problem until the drive caterpillar chain develops considerable slack. When this occurs, the slack gathers below where the caterpillar chain engages the conveyor chain. The caterpillar dogs will not meet the conveyor chain properly and a jam will occur. Reverse the drive or adjust the two caterpillar chain take-ups to remove the slack. DO NOT TIGHTEN TO A POINT WHERE THERE IS TENSION ON THE CATERPILLAR CHAIN. Also, be sure that the idler shaft is square with the centerline of the drive. If a given conveyor requires operation in either direction, the caterpillar chain must be adjusted at regular periods to prevent the unwanted accumulation of slack.
10. **Drive unit clutch friction liners worn out** - Frequent jams in a system will cause the overload friction clutch to slip. Eventually, the friction discs will wear out and the drive will stop functioning. Replace the friction clutch and readjust the new one as per instructions provided with the new assembly. Also, locate the problem area in the system and solve the problem. It is a good idea to keep a set of friction clutch liners on hand in case you may need to replace them immediately.

11. **Worn conveyor track curves** - When the chain pull is excessive at any given curve (horizontal or vertical), the radial loading on the chain wheels is great enough to cause a deformation of the track wear surface. This is called peening. The top vertical curve is the most susceptible to this because the two lips are unsupported at the end of the slot. If the overload continues to exist, the lips of the top vertical curve will finally roll downward until the chain wheels come through and the drive will eventually jam. Meanwhile, the "tow in" of the vertical wheels causes the wheel bearing to deteriorate rapidly. In horizontal and bottom vertical curves, the peening or rolling action is manifested by a definite bulge. In some cases, the hardened lateral chain wheels will finally cut through the wall of the horizontal or bottom vertical curves. The reason for the high chain pull should be determined (See Item 1-1). This may necessitate an additional drive, better lubrication or a new conveyor chain. Along with these corrections, the damaged curves must also be replaced.
12. **Pendant, hook or load hang up** - A pin will shear or a clutch may slip because the product hook or product catches and hangs up on a conveyor guard, building steel, washer, etc. Also, a production worker will often purposely jam the drive by hooking the product carrier on a column or other stationary object. Locate the interference point or points. Sometimes, a simple sheet metal fender will serve to contain or prevent a product hook from swinging out to catch on a column of other stationary object.
13. **Chain corrosion from process equipment** - Chain corrosion resulting from acidic washers and hot caustic paint strippers causes great harm to the conveyor chain, unless proper precautions are taken. The most common problem, and the worst, are the washers that use phosphoric acid to etch the product for better paint adhesion. If the spray of this solution is allowed to reach the chain, the wheel races and the ball bearings will become etched and pitted. Continued exposure to the liquid or vapors will finally erode wear surfaces of the bearings until the balls drop out. Also, the connecting pin, the hourglass roller, and the lateral forged pin will wear rapidly. In certain other processing equipment through which the conveyor passes, steam, water sprays, etc. also take their toll. Rusting results and eventually in some cases, very rapid chain replacement is necessary. The customer must be made aware of the problem and advised to install sanitary hooks with triple baffles through the critical areas. It is also important to advise the customer that no overhead chain conveyor will withstand or endure the attacks of acid.
14. **Sub-freezing temperatures** - When a conveyor is subjected to sub-freezing temperatures, the various parts tend to become coated with frost, and if allowed to stop, the chain will finally freeze. Wheel bearings coated with ice will not rotate and the drive unit will not develop enough force to start the conveyor chain. While this problem is more common in applications involving freezers, it also occurs when a conveyor is used both inside and outside of a building in sub-freezing conditions. Going from a heated area to a cold area, the moisture condenses on the chain and eventually freezes. However, a system that is entirely outside typically will not have problems because the condensation does not occur as easily. The only problem with outside applications lies in the drive unit and in the gearbox. The grease in the gearbox can and typically will congeal and become solid. When this occurs, the drive motor does not have sufficient power to drive the gearbox which is froze up. When the drive unit appears to be froze, the only solution is to warm the gearbox to a point where the lubricant can thaw out. Once the lubricant is thawed the system will operate fine as long as it does not freeze again.
15. **Slack chain** - If too much slack chain is allowed to develop in a conveyor, and especially in a long system, the chain will accelerate and coast enough to telescope. This stops it momentarily, after which it surges ahead. The action described is due, in large part, to the normal elasticity of the chain. The longer the chain, the more pronounced is the surge. Also, the greater the chain pull, the greater the surge. Adjust the take-up to remove slack. In a long or level conveyor, it is preferable to use a spring loaded or an air operated take-up located just downstream from the drive unit. The automatic take-ups may be adjusted to keep a slight tension on the chain that absorbs some of the elasticity, thus reducing the surge.
16. **Mis-aligned track joints** - Mis-aligned track joints interrupt the free movement of the chain wheels. While the chain may not jam, a step at the juncture of the tracks causes the wheels to stop momentarily until chain tension increases enough to pull through. Elasticity allows the chain to stretch until the wheels break loose. If this is the problem, the chain will surge in 6" increments, which is the vertical chain wheel centers. Usually, the offending joint can be located by inspecting the chain movement, starting at the drive and moving downstream to where the surge stops or lessens. If one track is actually offset from the other, correction is made easiest by sawing through the joint and re-welding after alignment with a welding jig. Care should be taken to remove any weld deposits from inside the track prior to re-welding.

17. **Excessive chain pull** - Systems having excessive chain tensions will often pulsate. The condition is usually more evident just downstream from the drive. Also, it will be noted that the erratic action diminishes gradually all the way back to the drive where the movement is smooth. Again, the longer the chain the worse the pulsation. To locate the cause of the excessive chain pull, the conveyor chain should be inspected first to insure that it is adequately lubricated and that the lateral chain wheels are not worn sufficiently to cause the vertical chain wheels to slide around the horizontal track curves. If the latter is the case, the chain must be replaced. Should the problem be lubrication, the chain must be lubricated thoroughly. Should the pulsation persist, determine the product loads (by weighing), load centers and then calculate the chain pull. This may indicate the need for an additional drive. Also, in the process of determining the pull, the second drive unit can be located.
18. **Pinched track** - At start up of a new or revised conveyor, very often a damaged piece of straight or curved track finds its way into the system. This is usually discovered when the conveyor chain is installed. At other times, the track is either shifted after erection or possibly re-welded. In any event, the track side walls may close in at one point to create an obstruction sufficient to produce pulsation in the chain. The pinched track may be located by following the instructions set forth in #2-2. Once located, the problem is easily corrected by hitting the center of the track on top with the spherical end of a ball peen hammer. If the track sides should be bent inward, the piece in question must be replaced.
19. **Excessive chain length** - Any given conveyor with an unusual number of vertical and horizontal curves plus great length will have a tendency to pulsate, regardless of the draw bar pull. As indicated earlier, the chain is elastic to a degree and the elasticity is accentuated by length. Therefore, lubrication must be adequate, chain slack must be held to a minimum and the track joints must be smooth. Corrective action may be taken as outlined in #15. If this fails to achieve a proper operation, an additional drive must be installed.
20. **Defective drive unit** - If a conveyor should be pulsating just back or upstream of the drive unit, it would indicate a problem in the drive. By removing the caterpillar chain cover and one side of the drive chain track, it may be found that the caterpillar dogs are not seating down into the lateral chain links. This can occur if the chain is elongated beyond  $\frac{1}{4}$ " per foot; the caterpillar chain is damaged or out of alignment; the drive chain guide is bent or; the motor drive chain is too loose and bouncing up and down. An inspection of all drive components is necessary and corrections made as indicated.
21. **Lack of lubrication** - A customer may fail to lubricate the conveyor chain because of inadequate maintenance, lack of an oilier, or fear of oil drippage. In any case, when the chain is not lubricated, the useful life will be drastically decreased. Without an oil film, the connecting pin joints and bearings will wear rapidly. Also, the chain tension will mount to accelerate wear. Ask the lubrication supplier to recommend a proper lubricant, taking into consideration the operating conditions with special attention to temperatures. If the fear of contamination is great, recommend an oilier, which can be regulated to apply the proper amount of material. Also, the oilier should be placed in a section of conveyor where the product is not being transported.
22. **Exposure to abrasives** - Oftentimes the conveyor will be placed in or near a shot and/or sand blasting machine, or in an area where the air is heavily laden with abrasive particles. The abrasives do find their way into the chain wheel bearings. The oil on the chain actually attracts and holds the gritty substance. In some cases, the bearings clog and the wheels will not rotate. If they do continue to turn, the abrasive dust grinds away the bearing cones, races and balls. The chain will, of course, only function for a short period before replacement is necessary. In the case of a shot or sandblast machine, the conveyor should be located over the machine cabinet tops. Product hooks can then be suspended through a very narrow slot in the cabinet top with rubber seals at both sides. In other situations, special equipment can be used to prevent the abrasive dust from entering the conveyor track.
23. **High temperature** - Burn-off and glass tempering ovens, plus certain other types of equipment operate at temperatures reaching 1000 Degrees F. and higher. When **E-Trac** or any other overhead conveyor, is exposed to any temperature above 450F., the hardened heat treated parts such as pins, wheel cones, races and balls, are softened by annealing. The drop in hardness is in direct relation to the temperature involved. Since the parts mentioned are heat-treated to accommodate certain loading, any hardness reduction accelerates wear. Remove the conveyor from the heat zone by slotting the top of the oven and installing continuous cover plates on the conveyor. Also, replace the conveyor chain.
24. **Corrosion** - Chain life is drastically shortened when it is exposed to corrosive substances, and particularly acids. The problem usually occurs when the conveyor is used to transport parts through certain washers, paint strippers, etc. See #13
25. **Drives out of location** - In multi-drive systems, the placement and number of drives is critical. An error in this procedure can cause replacement of conveyor chain at short intervals. It is easy to induce extra tension in the chain by placing a drive just upstream from a loaded decline. The force generated by the decline offers help to the drive motor and since all motors in a given system have equal torque, the chain tension is increased. Relocate drives to eliminate the problem. NOTE: Consult 1stSource for recommended locations.

26. **Drives out of coordination** - In certain multi-drive systems, the drive motors fail to coordinate or work together. This causes abnormal tension, which accelerates chain wear. This requires that a complete check of the drives be made as follows:

- a. Check all motor nameplates. They must be identical except for the serial numbers.
- b. Check all motor drive sprockets. All must have the same number of teeth.
- c. Check caterpillar drive sprockets. These must all have the same number of teeth.
- d. Check amperage at each motor. The motors must have the same amperage draw.

**NOTE:** When ordering drive motor, please provide drive serial number, all motor name plate data, including serial numbers, and controller name plate data. This is all necessary if 1stSource is to supply a new drive motor or controller parts.

## Lubrication Guide

Interval	Item	Quantity	Type
<b>Weekly</b>	Conveyor oilier reservoir	Fill to level mark	Varies
	Drive shaft bearings	Four grease fittings	NGLA #2 Lithium
	Drive roller chain	Brush or spray	Chain lube
	Drive caterpillar chain	Brush or spray	Chain lube
<b>Monthly</b>	Air cylinder oilier	Fill to level mark	Refer to mfg instructions
	Drive gear reducer	Fill to level mark	SAE 120 Oil
<b>6 Months</b>	Power & Free Trolleys	Four grease fittings	NGLA #2 Lithium
	Carrier load bars	Two grease fittings	NGLA #2 Lithium
<b>Annually</b>	Drive gear reducer	Drain and refill	SAE 120 Oil
	Chain take-up assembly	Grease telescoping track	SAE 10 Oil
	Automatic stop slide plates	Grease	SAE 10 Oil
<b>Notes</b>	Lubricate the bearings and other parts of the drive unit before starting up the conveyor.		

**WARNING!**

**NEVER OPERATE  
EQUIPMENT WITHOUT  
PROPER GUARDING IN  
PLACE PER OSHA  
STANDARDS!**

**Preventive Maintenance Schedule**

<b>Schedule</b>	<b>Event</b>
Weekly	Inspect chain slack Inspect take-up
Monthly	Inspect and lube drive shaft bearing Inspect and lube drive roller chain Inspect and lube drive caterpillar chain Inspect and fill motor gear reducer Inspect frog switch slide plates
Annually	Drain and fill motor gear reducer Inspect carriers
Bi-Annually	Pull chain and inspect wear



# Standard E-Trac 6 Parts

Part Number	Description	Shipping Weight
E-10-110	Standard painted track (10' sections)	50.00
E-10-110-I	Standard inverted track (10' sections)	50.00
E-10-110-U	Unpainted track (10' sections)	50.00
E-10-110-S	Stainless steel track (5' sections)	
E-10-200	Support bracket	2.00
E-10-210	Joint bracket	3.00
E-10-220	Zee bracket	2.00
E-10-230	Track welding jig	1.50
E-10-240	Inspection section	16.50
E-10-250	Carrier insert section	16.50
E-10-260	Anti-backup safety stop	3.00
E-10-270	Expansion sleeve	8.00
E-10-280	Track end yoke	0.50
E-10-290	Pin stop device	10.00
E-10-300	Anti-runaway device	10.00
E-11-100	Standard chain	2.50
E-11-101	Heavy duty chain	2.72
E-12-100	Skeleton drive frame	215.00
E-12-200	Slow speed drive <15fpm	305.00
E-12-200-I	Slow speed drive <15fpm	305.00
E-12-300	Fast speed drive >15fpm	315.00
E-12-300-I	Fast speed drive >15fpm	315.00
E-12-470	Explosion proof motor	
E-12-480	Brake motor	
E-12-490	Clutch brake	
E-12-500	230 volt 3-15fpm	15.00
E-12-600	460 volt 3-15 fpm	15.00
E-12-700	230 volt 15-45 fpm	15.00
E-12-800	460 volt 15-45 fpm	15.00
E-13-100	Manual brush oiler	13.00
E-13-200	Electro brush oiler	14.00
E-13-300	Automatic lubricator	60.00
E-13-350	Digilube lubricator	
E-13-400	Track cleaner	
E-13-500	Chain cleaner	
E-13-101	Replacement brush	2.00
E-14-1830	18" radius x 30 degree HC	5.00
E-14-1845	18" radius x 45 degree HC	7.50
E-14-1860	18" radius x 60 degree HC	10.00
E-14-1890	18" radius x 90 degree HC	15.00
E-14-18180	18" radius x 180 degree HC	30.00
E-14-2430	24" radius x 30 degree HC	5.00
E-14-2445	24" radius x 45 degree HC	7.50
E-14-2460	24" radius x 60 degree HC	10.00
E-14-2490	24" radius x 90 degree HC	15.00
E-14-24180	24" radius x 180 degree HC	30.00

Part Number	Description	Shipping Weight
E-14-2730	27" radius x 30 degree HC	6.00
E-14-2745	27" radius x 45 degree HC	9.00
E-14-2760	27" radius x 60 degree HC	12.00
E-14-2790	27" radius x 90 degree HC	18.00
E-14-27180	27" radius x 180 degree HC	36.00
E-14-3630	36" radius x 30 degree HC	8.00
E-14-3645	36" radius x 45 degree HC	12.00
E-14-3660	36" radius x 60 degree HC	16.00
E-14-3690	36" radius x 90 degree HC	24.00
E-14-36180	36" radius x 180 degree HC	48.00
E-14-3930	39" radius x 30 degree HC	8.66
E-14-3945	39" radius x 45 degree HC	13.00
E-14-3960	39" radius x 60 degree HC	17.33
E-14-3990	39" radius x 90 degree HC	26.00
E-14-39180	39" radius x 180 degree HC	52.00
E-14-4830	48" radius x 30 degree HC	10.66
E-14-4845	48" radius x 45 degree HC	16.00
E-14-4860	48" radius x 60 degree HC	21.33
E-14-4890	48" radius x 90 degree HC	32.00
E-14-48180	48" radius x 180 degree HC	64.00
E-14-5130	51" radius x 30 degree HC	11.33
E-14-5145	51" radius x 45 degree HC	17.00
E-14-5160	51" radius x 60 degree HC	22.66
E-14-5190	51" radius x 90 degree HC	34.00
E-14-51180	51" radius x 180 degree HC	68.00
E-14-6030	60" radius x 30 degree HC	16.00
E-14-6045	60" radius x 45 degree HC	24.00
E-14-6060	60" radius x 60 degree HC	32.00
E-14-6090	60" radius x 90 degree HC	48.00
E-14-60180	60" radius x 180 degree HC	96.00
E-14-7290	72" radius x 90 degree HC	
E-14-8490	84" radius x 90 degree HC	
E-14-9690	96" radius x 90 degree HC	
E-14-SPL	Special Radius Horizontal Curve	
E-15-2430	24" radius x 30 degree TVC	8.00
E-15-2445	24" radius x 45 degree TVC	12.50
E-15-2460	24" radius x 60 degree TVC	16.00
E-15-2490	24" radius x 90 degree TVC	25.00
E-15-4830	48" radius x 30 degree TVC	18.00
E-15-4845	48" radius x 45 degree TVC	27.00
E-15-4860	48" radius x 60 degree TVC	36.00
E-15-4890	48" radius x 90 degree TVC	54.00
E-16-2430	24" radius x 30 degree BVC	8.00
E-16-2445	24" radius x 45 degree BVC	12.50
E-16-2460	24" radius x 60 degree BVC	16.00
E-16-2490	24" radius x 90 degree BVC	25.00

## CONSULT FACTORY FOR ANY COMPONENT NOT LISTED

Part Number	Description	Shipping Weight
E-16-4830	48" radius x 30 degree BVC	18.00
E-16-4845	48" radius x 45 degree BVC	27.00
E-16-4860	48" radius x 60 degree BVC	36.00
E-16-4890	48" radius x 90 degree BVC	54.00
E-17-24180	24" pitch dia x 180 deg TW	100.00
E-17-30180	30" pitch dia x 180 deg TW	130.00
E-17-36180	36" pitch dia x 180 deg TW	160.00
	Add if temp >250 deg F	0.00
E-18-100	Short screw sleeves	10.00
E-18-110	Short screw fittings 24"	80.00
E-18-110-I	Inverted screw fittings	140.00
E-18-120	Tandem screw fittings	150.00
E-18-200	Framed basic assembly	200.00
E-18-200-I	Inverted frame assembly	200.00
E-18-201	Screw package	10.00
E-18-202	Spring package	19.00
E-18-203	Air package	55.00
E-18-204	Limit switch kit	10.00
E-18-130	Long screw fittings 48"	100.00
E-19-110	Straight side pendant	0.50
E-19-120	Standard clevis pendant	0.50
E-19-210	Rigid pendant	0.50
E-19-220	Rigid clevis pendant	0.50
E-19-300	"V" pendant - 8" drop	1.80
E-19-410	Swivel fixture	0.50
E-19-500	Dbl susp rotating star	2.00
E-19-600	Dbl susp load hook	2.00
E-19-420	Sng susp index load hook	1.00
E-19-430	Rotating star indexing	16.50
E-19-700	Mult susp load hook	9.50
E-19-810	Holdback dog	0.50
E-19-811	Holdback dog spring	0.10
E-19-900	1 piece inverted pendant	0.50
E-19-910	3 piece inverted pendant	0.50
E-19-825	Basic TT pusher dog	3.00
E-19-850	Delatching TT pusher dog	4.00
E-19-900	Over/Under P&F pusher dog	
E-20-210	Two wheel carrier 5/8"	1.50
E-20-210-01	Pendant body for E-20-210	
E-20-210-02	Wheel for E-20-210	
E-20-210-03	Axle for E-20-210	
E-20-210-04	Vertical guide roller for E-20-210	
E-20-210-05	Guide roller pin for E-20-210	
E-20-220	Two wheel carrier 1/2"	1.50
E-20-410	Four wheel carrier	2.50
E-20-420	Four wheel carrier	6.00
E-20-810	Eight wheel carrier	14.00
E-20-160	Sixteen wheel carrier	38.00
E-20-440	Retread carrier	2.50

Part Number	Description	Shipping Weight
E-20-460	Four wheel carrier	7.00
E-20-470	Four wheel carrier	11.00
E-20-480	Front Tandem carrier	
E-20-490	Rear Tandem carrier	
E-20-500	Over/Under P&F front trolley	
E-20-600	Over/Under P&F rear trolley	
E-20-550	Over/Under P&F intermediate	
E-21-110	LH standard frog	35.00
E-21-210	RH standard frog	35.00
E-21-130	LH universal frog	35.00
E-21-230	RH universal frog	35.00
E-21-300	Standard 3-way frog	50.00
E-21-400	3-way "T" switch	50.00
E-21-510	Manual throw for frog sw	8.00
E-21-530	Manual throw for univ sw	10.00
E-21-610	Air pkg throw for frog sw	15.00
E-21-630	Air pkg throw for univ sw	15.00
E-21-700	Limit switch package	2.00
E-22-100	LH escapement stop	35.00
E-22-200	RH escapement stop	35.00
E-22-500	Over/Under P&F stop assy	
E-23-106	6" gap cross over	
E-23-112	12" gap turntable	
E-23-124	24" gap turntable	
E-23-200	Throw control for turntable	
	Add for tandem turntables	
E-12-101	Idler shaft	
E-12-102	Head shaft	
E-12-103	Sprocket	
E-12-104	Keystock	
E-12-105	Drive chain assembly	
E-12-106	Drive track lip (pair)	
E-12-107	Backup bar assembly	
E-12-108	Cat chain guard	
E-12-109	Drive chain guard	
E-12-110	3/4 hp motor	
E-12-111	1-1/2 hp motor	
E-12-113	20:1 reducer	
E-12-114	50:1 reducer	
E-12-115	Friction linings	
E-12-116	Pillow block bearing	
E-12-400	Drive dog (drive chain)	
E-12-410	Inside roller link (drive chain)	
E-12-420	Connecting link (drive chain)	
E-25-001	Touch up paint (spray)	
E-25-003	Driving lug for E-19-825	
E-25-004	J hook	
E-50-001	Pusher Arm	

NOTES:

HC = Horizontal Curve

TVC = Top Vertical Curve

BVC = Bottom Vertical Curve

TW = Traction Wheel

TU = Take-Up

SS = Side x Side Power and Free

# **E-Trac 6** **Enclosed Track Conveyor Equipment**

## **Non-Powered Systems**

**Hand Pushed manual systems**  
**Manual Throw or automatic switches**  
**load capacity up to 1,000 lbs. per carrier**  
**Tight 18" radius horizontal curves**

## **Powered Systems**

**conventional or inverted systems**  
**6" pitch chain**  
**80 lb. load capacity every 6" (160 lbs. per foot)**  
**750 lb. chain pull capacity per drive unit**

## **E-Trac Q Power & Free Systems**

**Over/Under or Side x Side systems**  
**Load Capacity up to 1,000 lbs. per carrier**



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